

IN THE CLAIMS:

Please amend the claims as follows.

1. (Currently Amended) A method for reducing signed load latency in transfer of data from a cache memory to another element in a microprocessor comprising:

transferring data from a the cache memory to an aligner;

generating a sign bit for the data; and

transferring the sign bit to the aligner via a bypass.
2. (Currently Amended) The method of claim 1, further comprising:

adjusting the data during transfer to the aligner via a data path; and

~~adjusting~~ selecting the sign bit during transfer to the aligner via the bypass.
3. (Original) The method of claim 2, further comprising:

selectively processing a part of the data for use in generating the sign bit.
4. (Currently Amended) The method of claim 3, further comprising:

~~selectively~~ processing the part of the data selected for use in generating the sign bit based on an instruction from a CPU.
5. (Currently Amended) An apparatus for reducing signed load latency in transfer of data from a cache memory to another element in a microprocessor, comprising:

a data path connecting a the cache memory to an aligner; and

a bypass connecting the cache memory to the aligner;

wherein data is transferred from the cache memory to the aligner via the data path and a sign bit for the data is transferred from the cache memory to the aligner via the bypass.

6. (Currently Amended) The apparatus of claim 5, further comprising:
a select component for providing ~~a signal~~ signals to ~~generate~~ choose the sign bit for the data.
7. (Original) The apparatus of claim 5, wherein the bypass comprises:
a sign multiplexer; and
a real-sign multiplexer.
8. (Original) The apparatus of claim 6, wherein the select component provides a signal to choose a part of the data and to generate the sign bit for the data based on an instruction from a CPU.
9. (Original) The apparatus of claim 5, wherein the aligner comprises a plurality of sub-aligners.
10. (Original) An apparatus comprising:
means for transferring data from a cache memory to an aligner;
means for generating sign bit for the data;
means for transferring the sign bit to the aligner via a bypass;
means for adjusting the data during transfer to the aligner via a data path;
means for adjusting the sign bit during transfer to the aligner via the bypass;

means for selectively processing a part of data for use in generating the sign bit; and

means for selectively processing the part of the data selected for use in generating the sign bit based on an instruction from a CPU.

11. (Currently Amended) An apparatus comprising:

a data path connecting a cache memory to an aligner;

a bypass connecting the cache memory to the aligner;

wherein data is transferred from the cache memory to the aligner along the data path and a sign bit for the data is transferred from the cache memory to the aligner along the bypass;

a select component for providing ~~a signal~~ signals to ~~generate~~ choose the sign bit for the data, wherein the select component comprises

a sign multiplexer; and a real-sign multiplexer, and wherein the select component provides a signal for choosing a part of the data to generate the sign bit for the data based on an instruction from a CPU; and

wherein the aligner comprises a plurality of sub-aligners.